

Docket No. VIP-101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Keegan F. O'Neill, et al. )  
Serial No.: 09/964,373 )  
Filing Date: September 28, 2001 )  
Title: REMOTE PASSWORD RESETTING )  
INTERFACE (as amended) )  
\_\_\_\_\_  
)

Examining Attorney:  
Michael J. Pyzocha

Group Art Unit: 2137

**DECLARATION OF PRIOR INVENTION**

37 CFR 1.131

Box: Fee Amendment  
Assistant Commissioner of Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Keegan F. O'Neill makes the following Declaration with regard to the Office Action issued June 20, 2005 in the above-identified patent application.

1. I am an inventor named in this patent application. I have first-hand knowledge of the statements made herein and the documentation listed below.
2. Attached hereto and made a part hereof as Exhibit 1 is a true copy of a Power Point presentation entitled ezRESET SELF-HELP SECURITY SOLUTIONS FOR FORGOTTEN PASSWORDS. The presentation was used to describe the claimed method. This presentation was given on a date prior to May 10, 2001 but after September 28, 2000.

3. Attached hereto and made a part hereof as Exhibit 2 is a true copy of INSTALLATION AND USER GUIDE for ezRESET RDI (Version 1.0). This document was released to the public prior to May 10, 2001 but after September 28, 2000 and instructs users how to practice my claimed method.

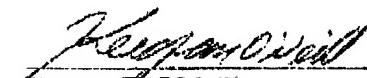
4. Attached hereto and made a part hereof as Exhibit 3 is a true copy of an e-mail communication entitled REMOTE DESKTOP INTERFACE which I prepared for my employer Vanguard Integrity Professionals-Nevada. This communication was originally prepared and modified on a date earlier than May 10, 2001 and refers to the steps for implementing the claimed method.

5. My co-inventors and I conceived the method for enabling an original password to be reset on a host computer from a remote station as recited in Claims 1-6 of our pending patent application on a date earlier than May 10, 2001.

6. The remote desktop interface to which this patent application relates was completed and sent to a customer for testing in early 2001, but prior to May 10, 2001.

7. All of the activities referred to herein took place in the United States or a NAFTA country (i.e., Canada).

I hereby declare that all statements made herein of my own knowledge and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
Keegan P. O'Neill

Dated



ezRESET™

Vanguard

ezRESET™

ezRESET for NT™



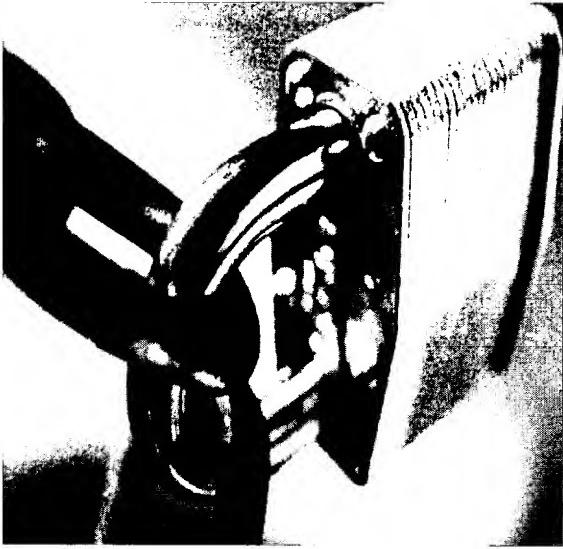
Help Security Solutions for Forgotten Passwords

S/N C9/164,373

EXHIBIT 1

BEST AVAILABLE COPY

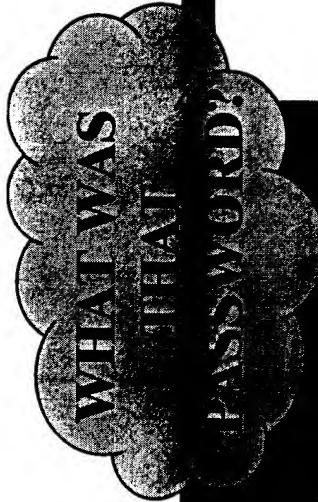
LOCKED OUT!



FORGOTTEN  
PASSWORDS  
IS A COMMON  
PROBLEM



Vanguard



# OVERLOADED HELP DESK

## ezRESET™

BEST AVAILABLE COPY

The process of getting a new password often is lengthy, embarrassing , and generally unproductive!

It required the intervention of the help-desk to solve the access problem.



Vanguard

# OVERLOADED HELP DESK

BEST AVAILABLE COPY

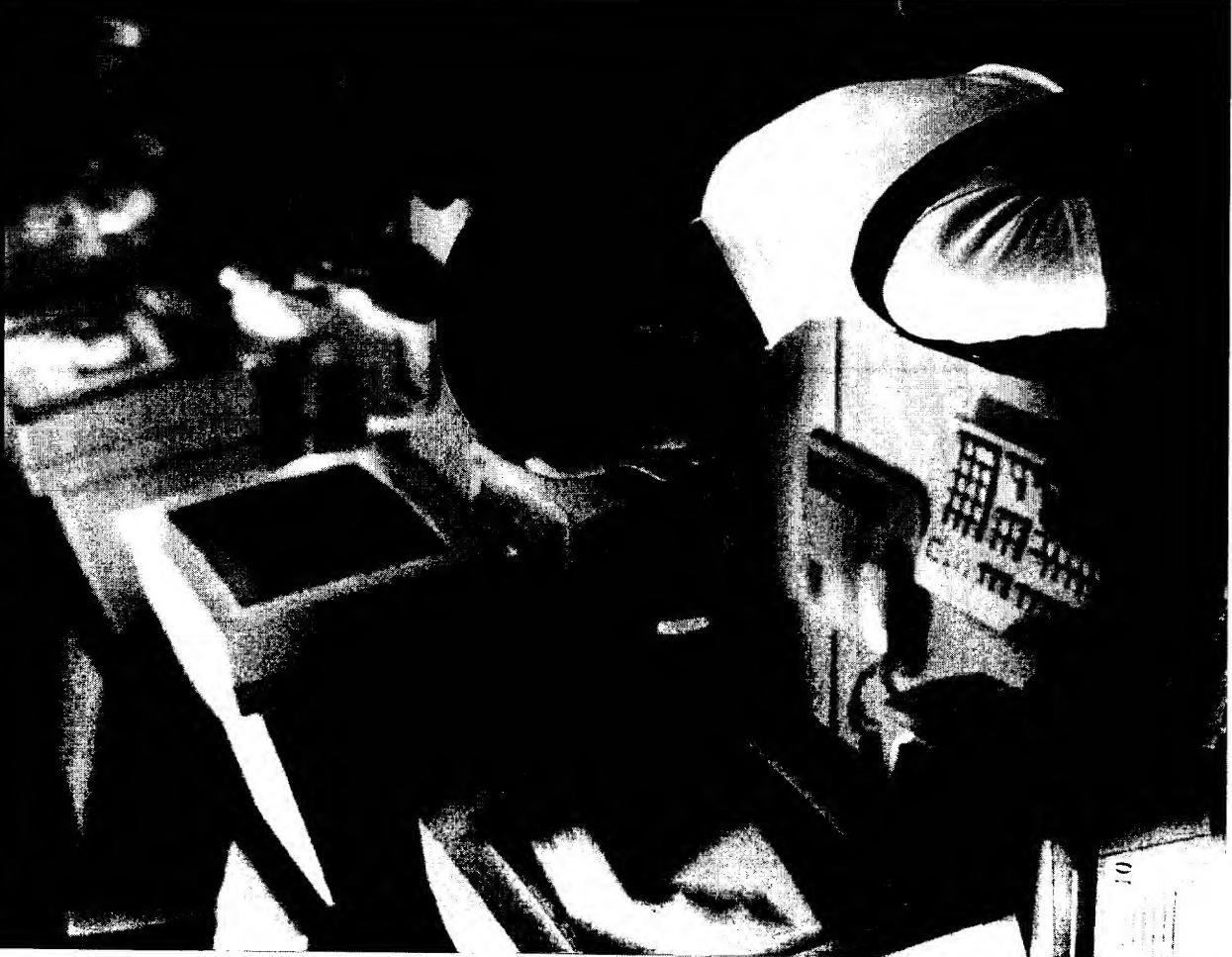
## ezRESET™

ezRESET saves your help-desk  
time and money!

ezRESET quickly and securely  
allows users to change their  
own passwords.



Vanguard



# DOING THE NUMBERS

BEST AVAILABLE COPY

## ezRESET™

- Tremendous savings!
- A medium-sized organization can potentially save hundreds of thousands of dollars a year.
- A large organization may be able to save millions!



Vanguard

# HELP DESK PRODUCTIVITY

## ezRESET™

- Self-help solution
- Users can change their own passwords at any time, and from any location
- Passwords can be changed from your favorite web browser.
- EASY-to-install
- EASY-to-use
- Fully secure
- Overall Security is greatly improved
- Ensures that proper security procedures are followed.

Designed for the enterprise environment



BEST AVAILABLE COPY



Profit from Security

Vanguard

# SECURITY SOLUTIONS

BEST AVAILABLE COPY

## ezRESET™

- Frees up Help-Desk Resources
- Increases Productivity
- Increases Profitability
- Quick & Secure
- Improves Security



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ezRESET™

ezRESET for NT™

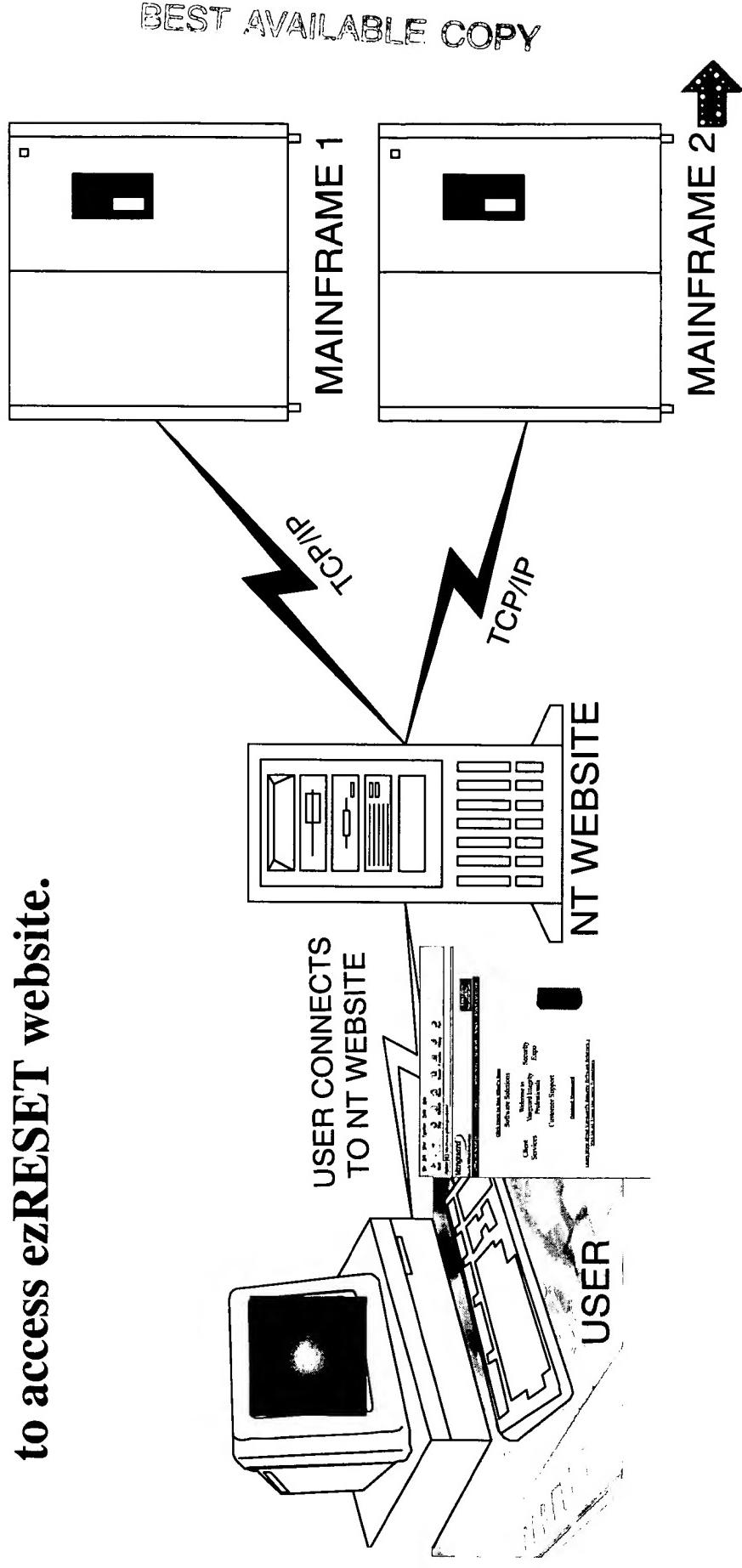
Overview and Demonstration

Profit from Security

# ezRESET™

User wants to Register:

1. User uses any favorite web browser on desktop to access ezRESET website.



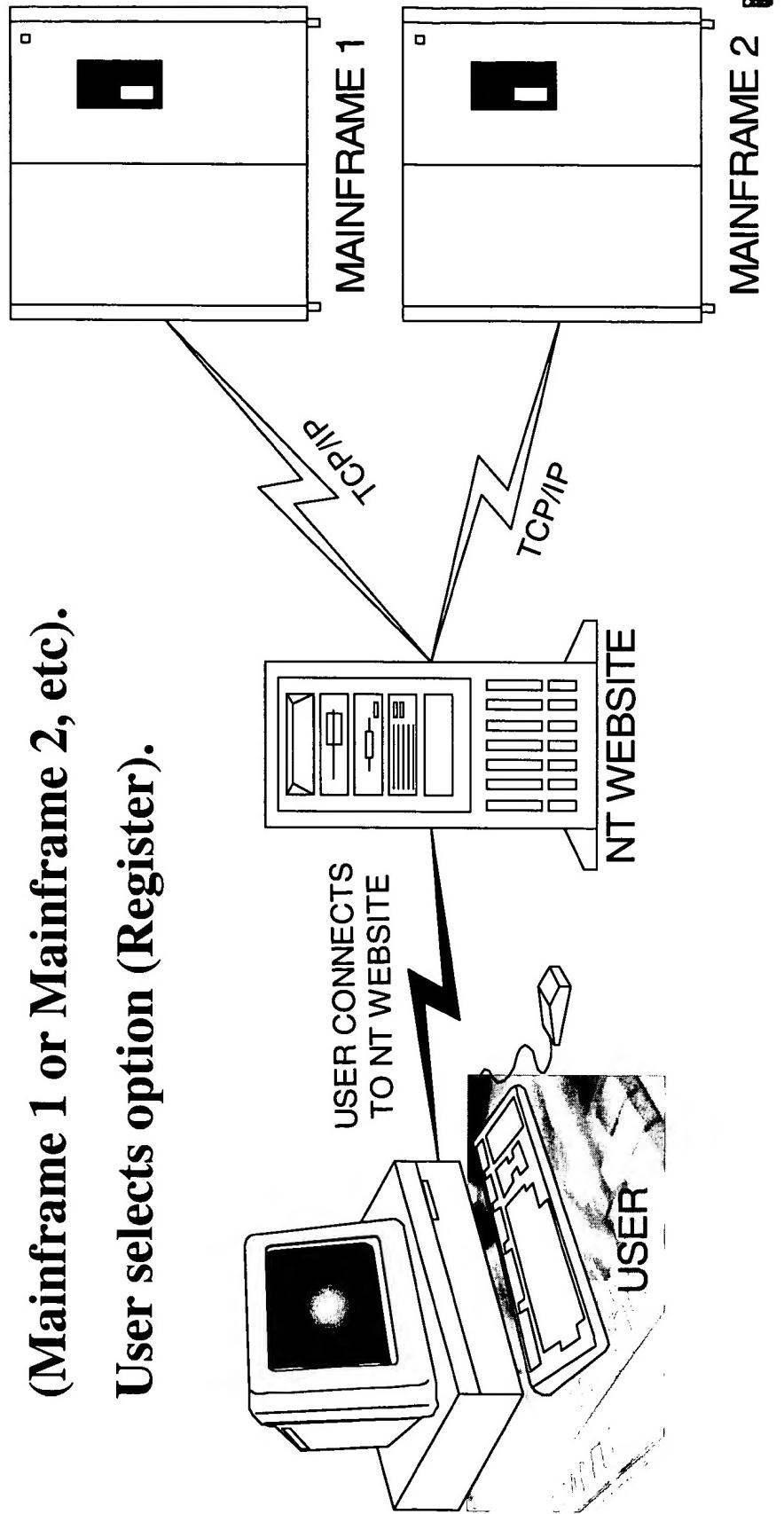
# ezRESET™

BEST AVAILABLE COPY

User wants to Register:

2. User selects which platform they want to use:  
(Mainframe 1 or Mainframe 2, etc).

User selects option (Register).



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# ezRESET™

User wants to Register:

3. User selects and responds to 3 questions.

**BEST AVAILABLE COPY**

**Vanguard**  
Security Without Compromise™

**Demo ezRESET**

After using ezRESET test your changes by clicking here

**Customizing ezRESET**

You can customize the screens and help files displayed by ezRESET.

**Customizing Help**

The Help information displayed when a user clicks on help is contained in  
`ResetHelpChangeDefault.html`,  
`ResetHelpChangeSetting.html`,  
`ResetHelpRegisterUser.html` and  
`ResetHelpResetPassword.html`.

By editing these files you can change the information that a user will see.

**Customizing the Screen**

**Instructions**

Welcome to ezRESET - the web interface to reset your own password.

ezRESET allows you to securely reset your own password at anytime without having to call the help desk.

**Registration Page**

Userid: \_\_\_\_\_  
Password: \_\_\_\_\_  
Default Password: Verify Default: \_\_\_\_\_  
Email ID: \_\_\_\_\_

**Submit** **Clear Fields**

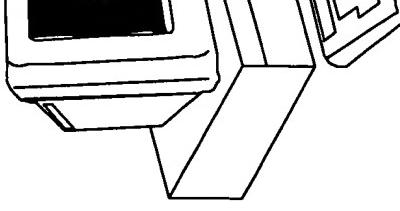
**Question 1:** \_\_\_\_\_  
Answer 1: \_\_\_\_\_

**Question 2:** \_\_\_\_\_  
Answer 2: \_\_\_\_\_

**Question 3:** \_\_\_\_\_  
Answer 3: \_\_\_\_\_

**Message:** Please fill out the Userid field and any other requested information and re-submit the form.

**F 1** **F 2** **Up Arrow**



**Vanguard**

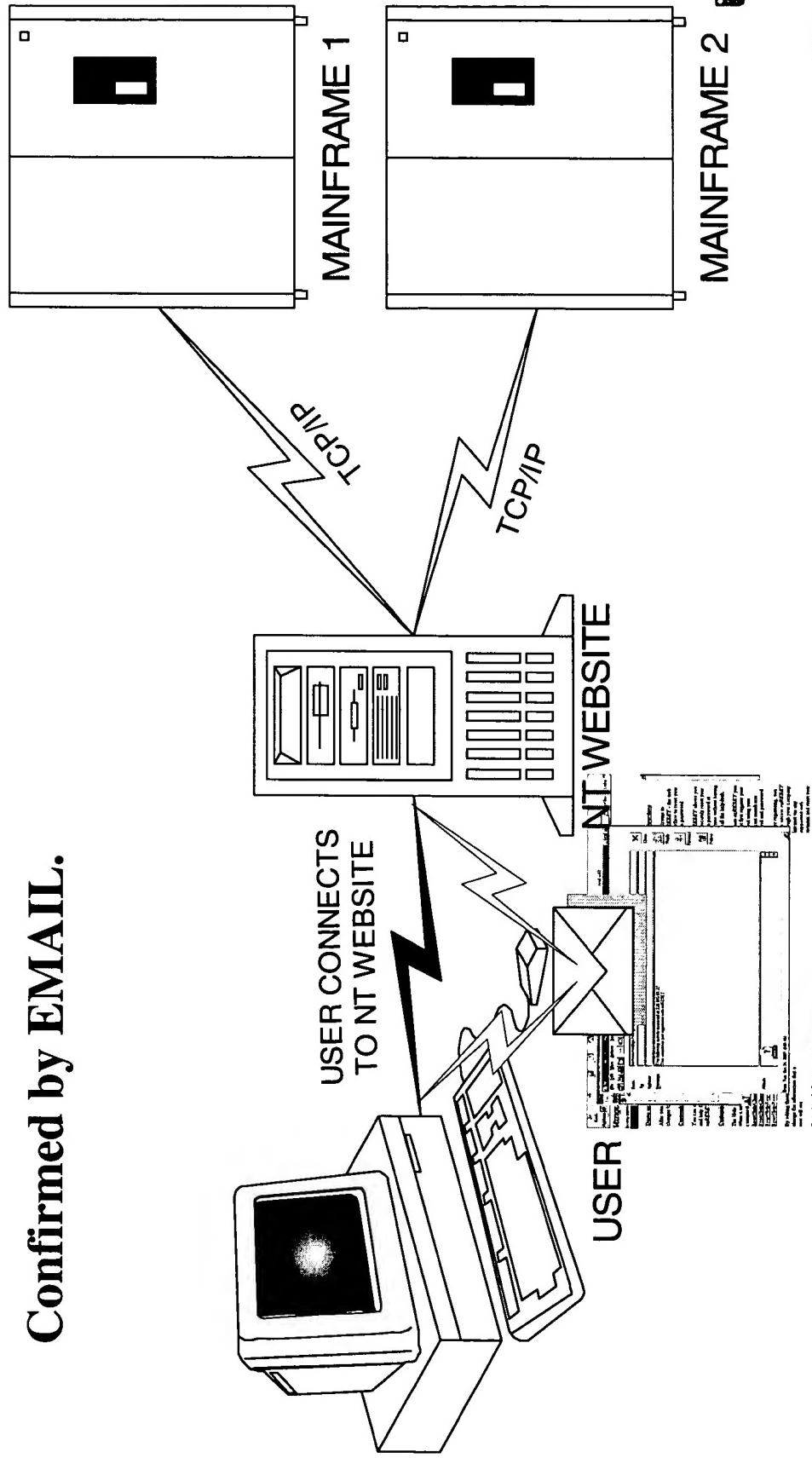
**ezRESET™**

BEST AVAILABLE COPY

User wants to Register:

3. Function is executed on the desired platform.

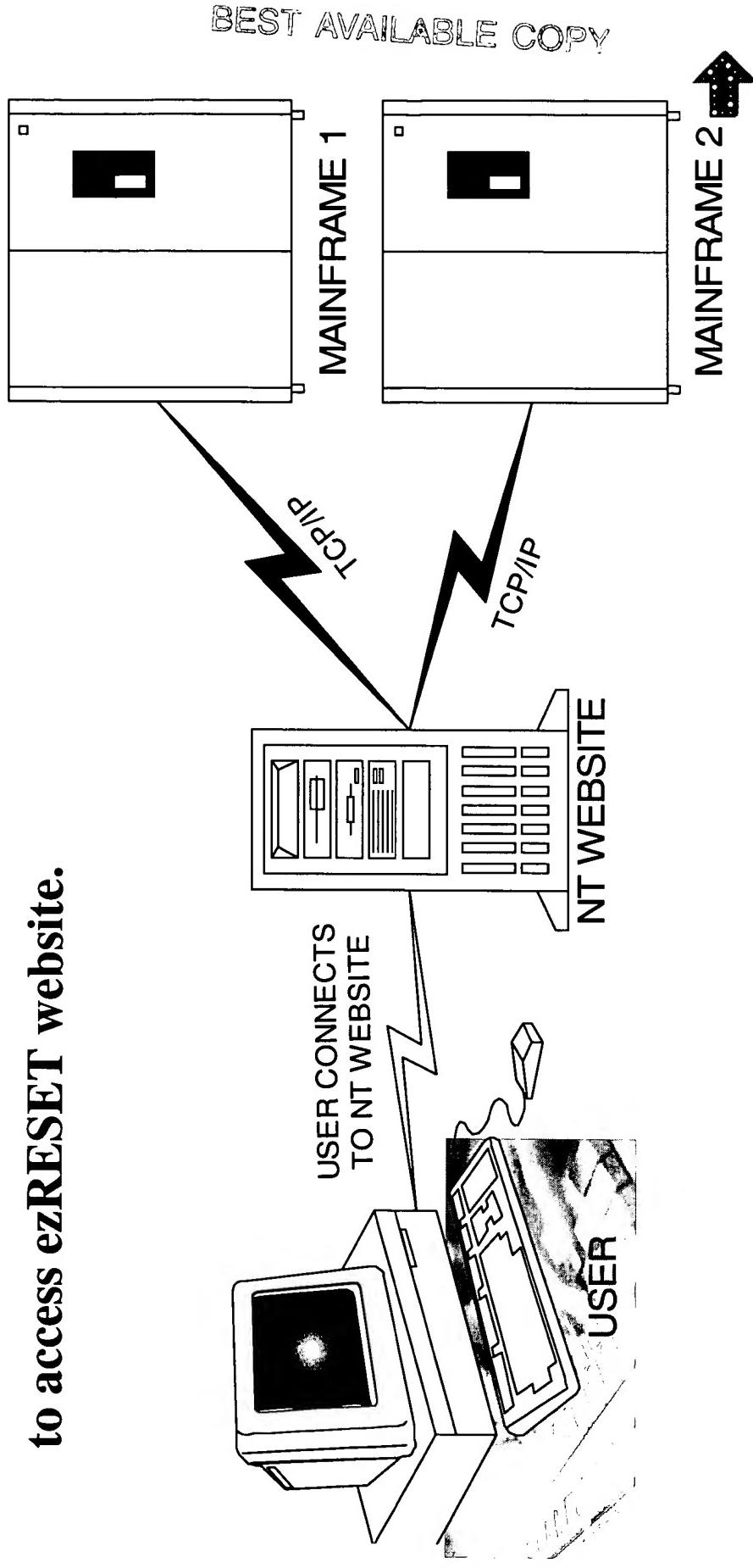
Confirmed by EMAIL.



# ezRESET™

User wants to RESET PASSWORD:

1. User uses any favorite web browser on desktop to access ezRESET website.



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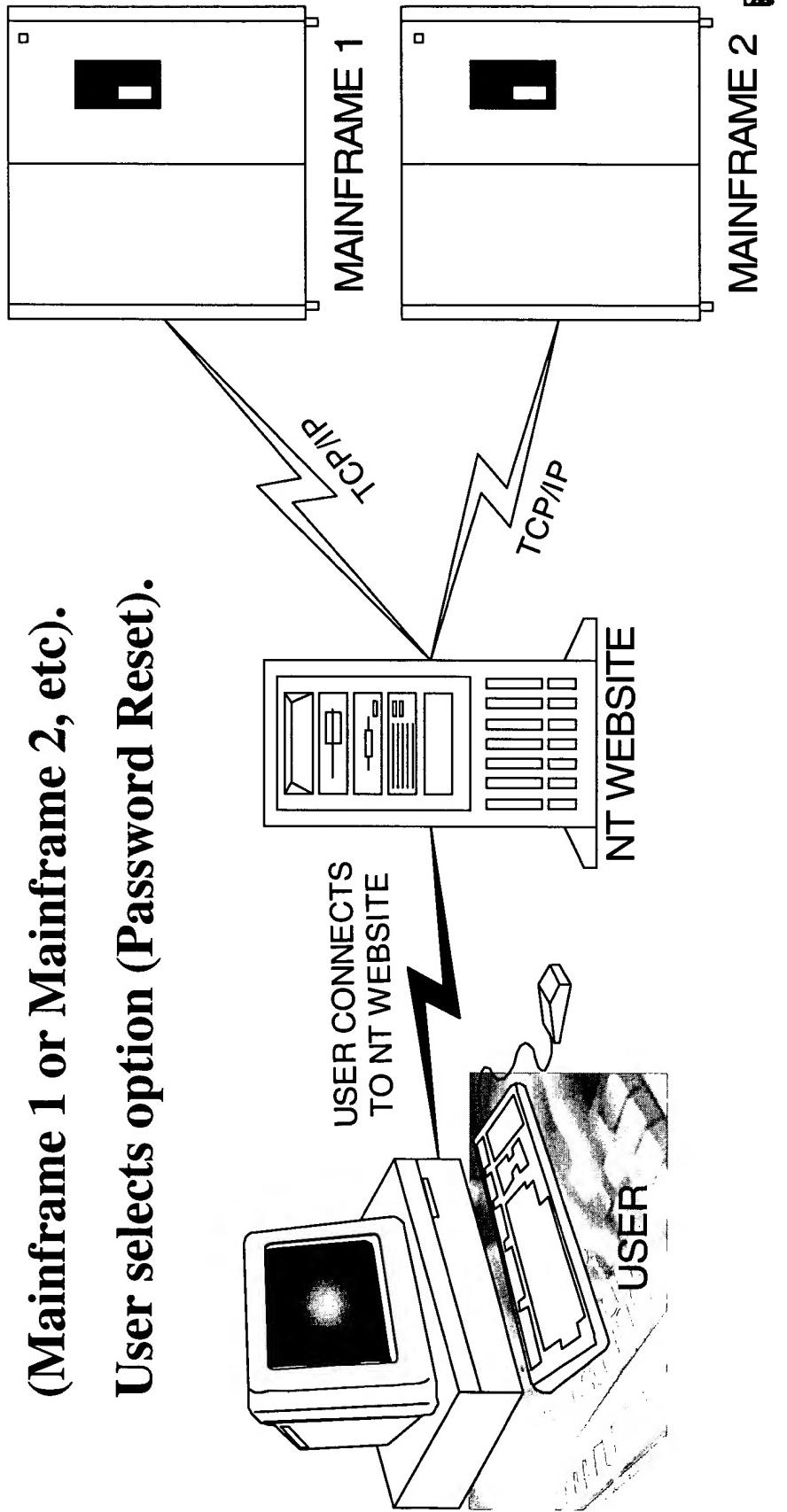
# ezRESET™

User wants to RESET PASSWORD:

2. User selects which platform they want to use:

(Mainframe 1 or Mainframe 2, etc).

User selects option (Password Reset).



BEST AVAILABLE COPY

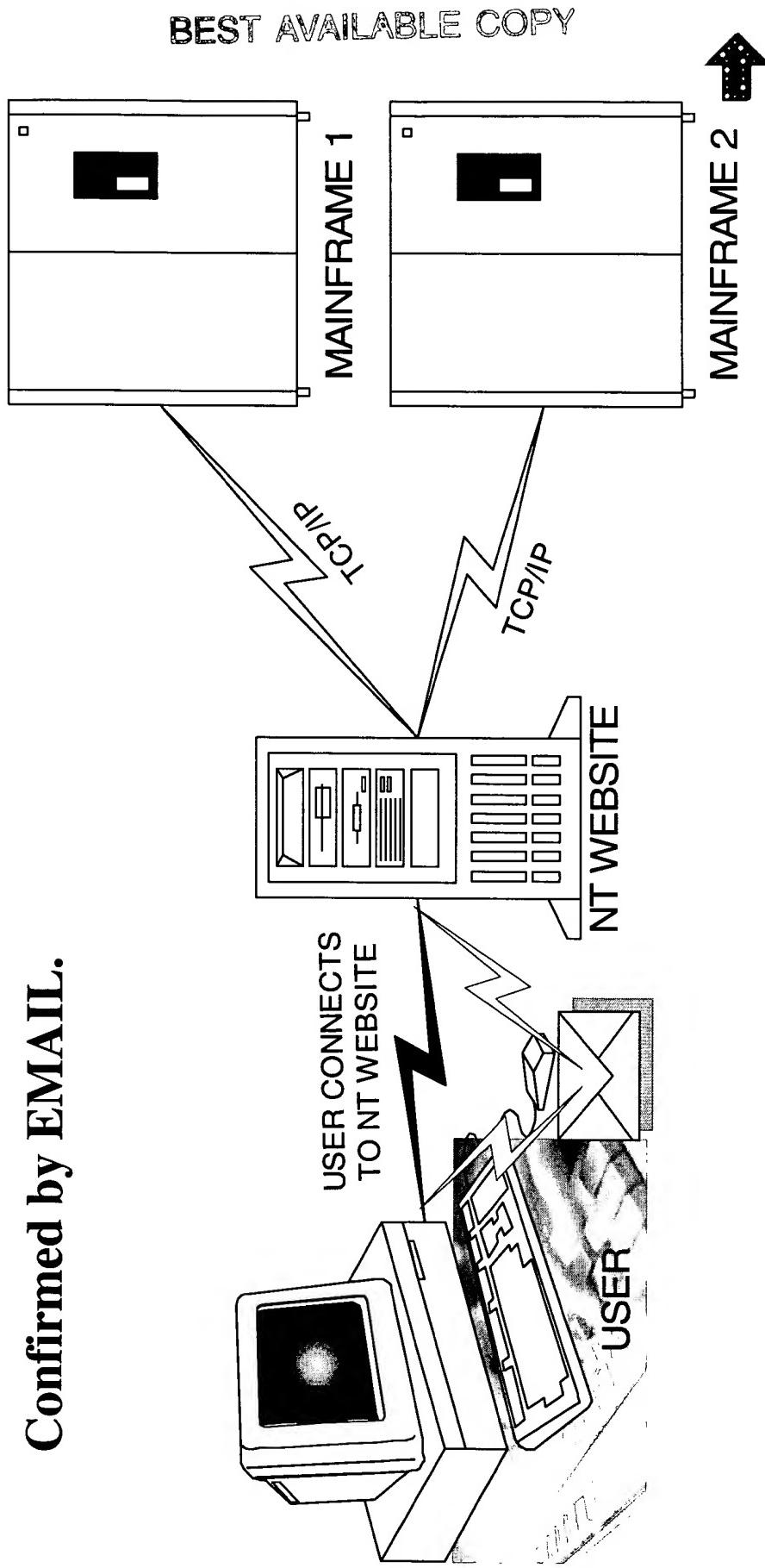
Vanguard

# ezRESET™

User wants to RESET PASSWORD:

3. Function is executed on the desired platform.

Confirmed by EMAIL.

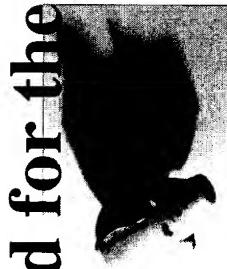


# HELP DESK PRODUCTIVITY

## ezRESET for NT<sup>TM</sup>

- Self-help solution
- Users can change their own passwords at any time, and from any location
- Passwords can be changed from a Windows-based workstation or through a favorite web browser
- EASY-to-install
- EASY-to-use
- Fully secure
- Overall Security is greatly improved
- Ensures that proper security procedures are followed.

Designed for the enterprise environment



Profit from Security

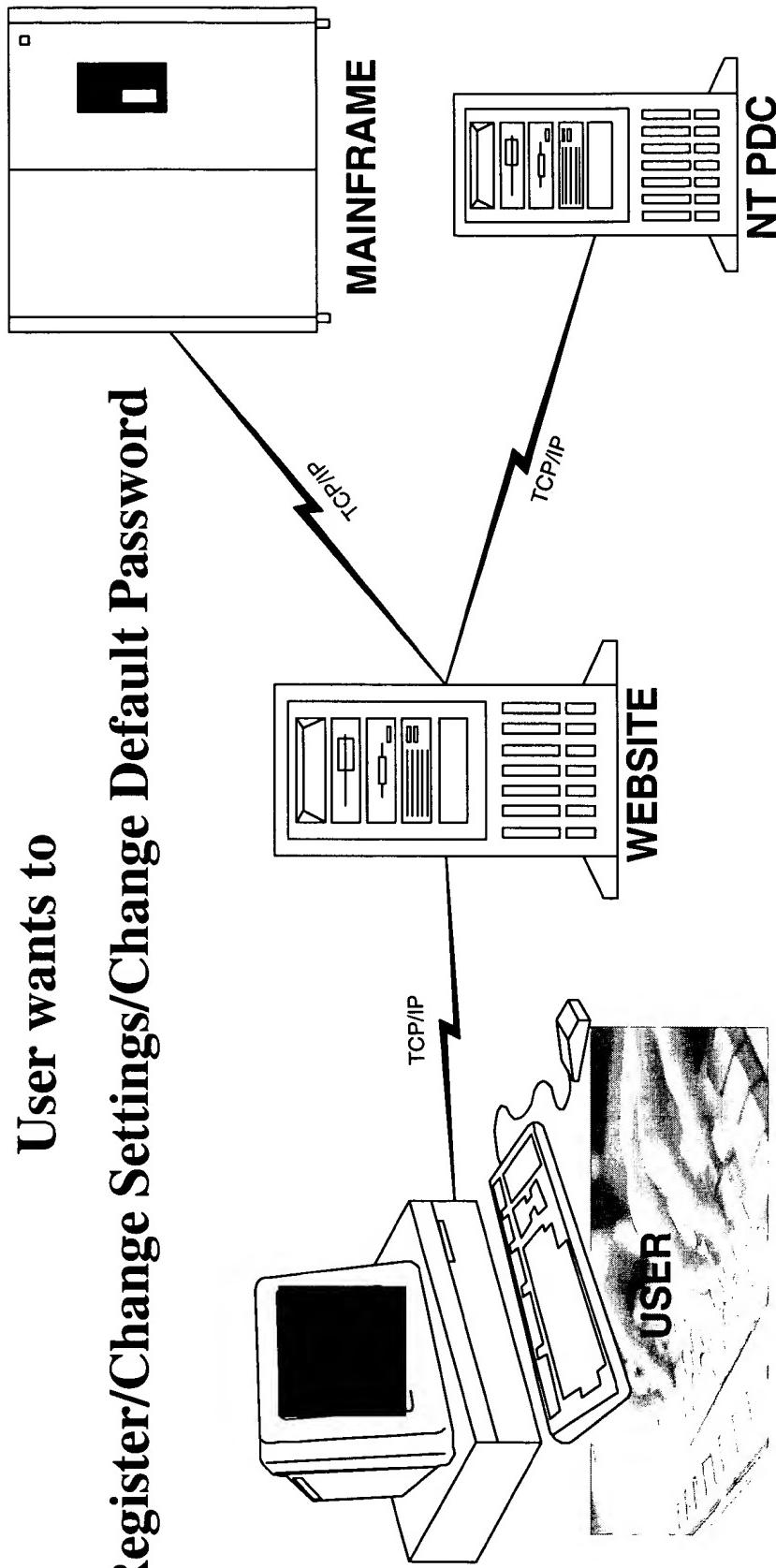


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# ezRESET for NT™

User wants to

Register/Change Settings/Change Default Password

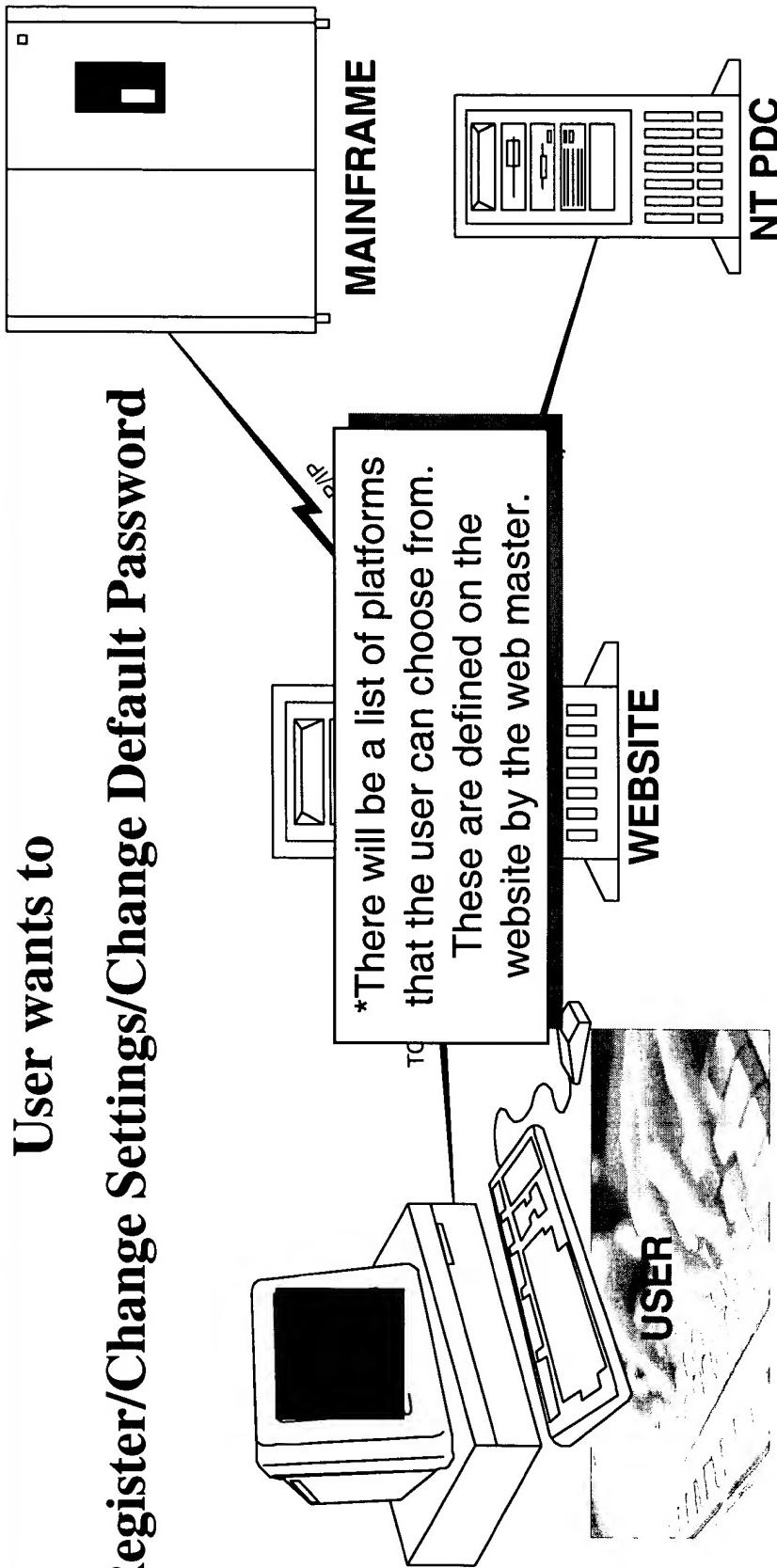


- 1a. User uses web browser on desktop to access ezRESET for NT website.

# ezRESET for NT™

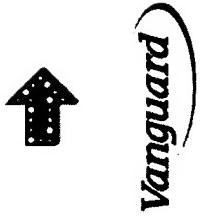
User wants to

Register/Change Settings/Change Default Password

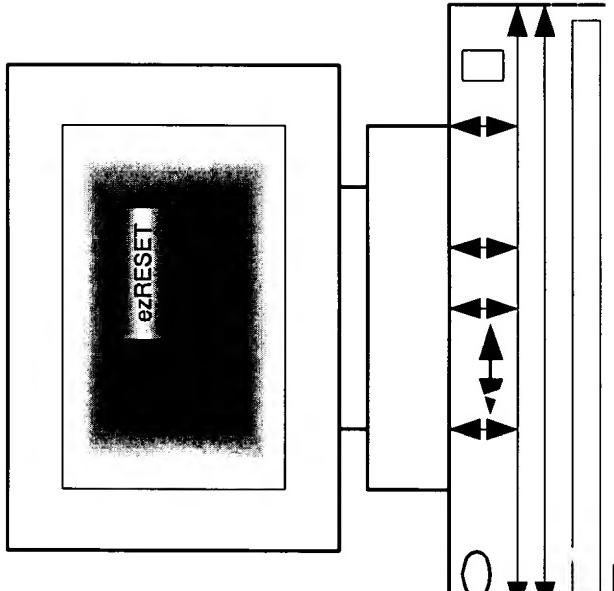


- 1b. User selects which platform they want to use (Mainframe, NT).\* User selects option (Register, etc.)

- 1c. Function is executed on the desired platform



# ezRESET for NT™



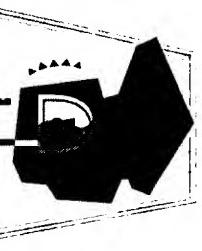
## DESKTOP or NT

- 2a. User wants to Reset password on workstation. User has access to desktop and browser.
- 2b. User selects Reset function.



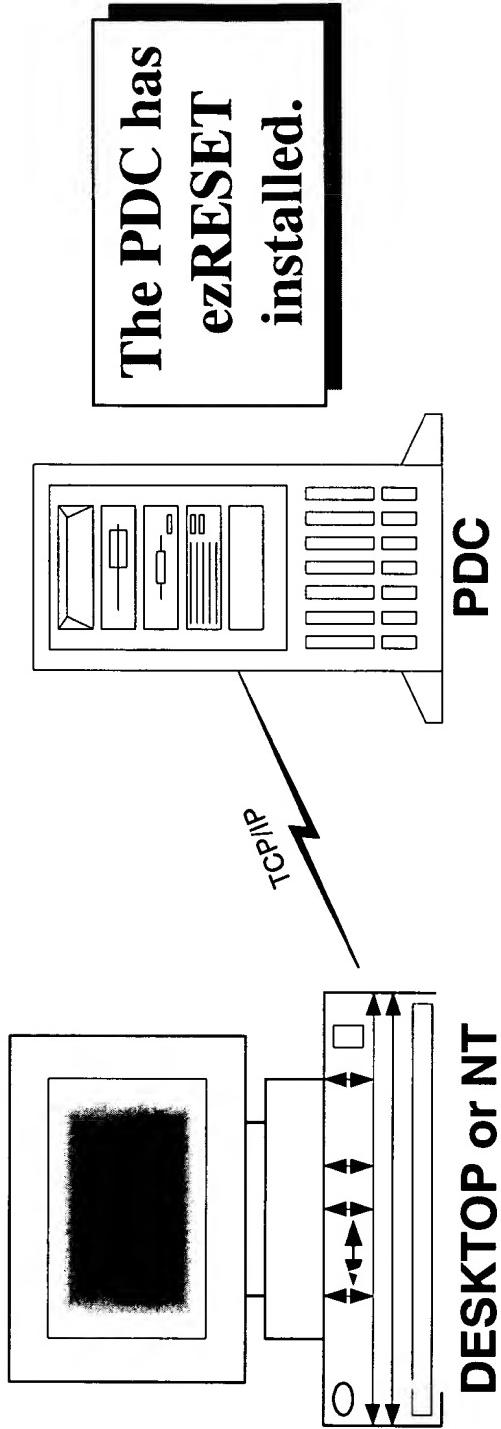
Vanguard

# ezRESET for NT™



User wants to Reset password.

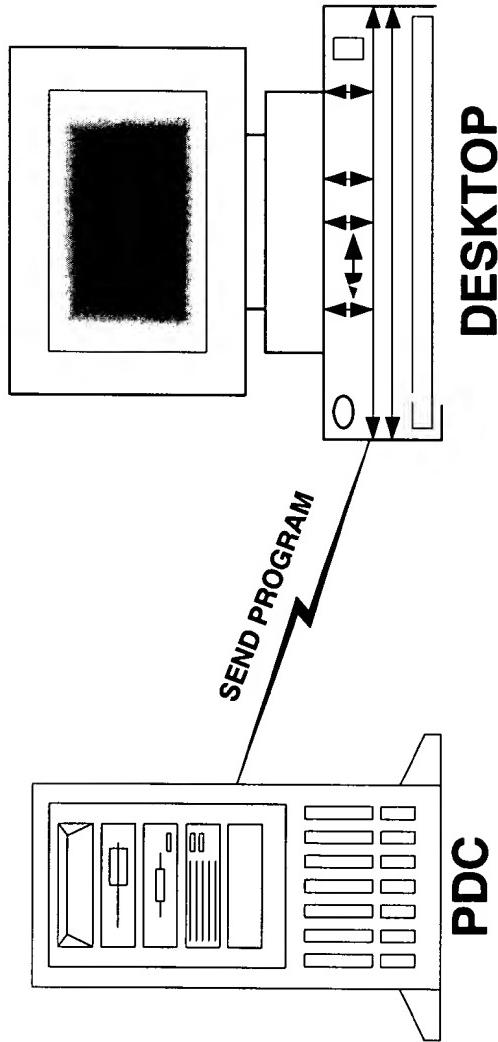
User CANNOT ACCESS desktop.



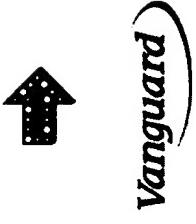
- 3a. User logs on using ezRESET for NT account.



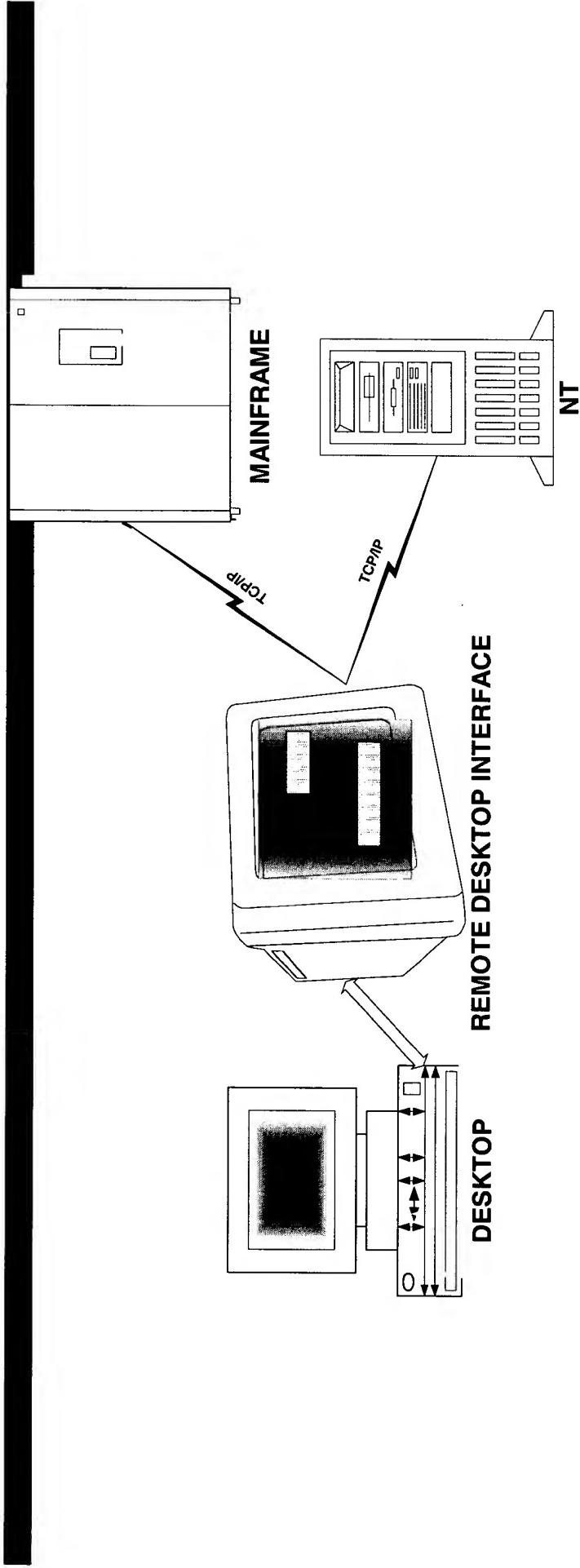
# ezRESET for NT™



- 3b. ezRESET for NT intercepts logon and realizes this is a request to reset a password and loads a program on the desktop.



# ezRESET for NT™



- 3c. The program (Remote Desktop Interface) displays a screen on the desktop where the user enters their ID and selects the platform were they want their password to reset.
- 3d. The RDI (Remote Desktop Interface) will then communicate with the selected platform. Retrieve the Q&A and send the answers back to the platform. It takes place of the web site in so far as resetting the password is concerned.



Vanguard

**ezRESET™**

**ezRESET for NT™**

**ORGANIC  
EXPANSION  
SOLUTION**



# Profit from Security

ezRESET™



ezRESET for NT™

Vanguard  
↑

***ezRESET RDI™***  
***Installation and User Guide***

**Version 1.0**

**EXHIBIT 2**

**S/N 09/964,373**



# **ezRESET RDI™**

Version 1.0  
Document Number VZRR-051028-100U

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# Introduction

## ***ezRESET RDI***

When users forget their password and cannot logon, they may not be able to get access to their desktop in order to use a web browser, or logon to the mainframe. Using ***ezRESET RDI*** will resolve their problem.

***ezRESET RDI*** is installed on an installation's domain controllers (DC's), both Primary and Backup. There is no need to install any software on the users desktops, making this a very simple way to distribute this solution. The administrator installs ***ezRESET RDI*** and specifies an account that is to be used by the end user(s) when they want to reset their password directly from the desktop, without having to logon. In this case, we will presume the account is **RESET**, with a password of **RESET**.

When the user attempts to logon using the **RESET** account, ***ezRESET RDI*** will intercept the logon. It will recognize this as a request to do a reset. The logon will be cancelled and a small amount of code will be run on the users desktop. This code will provide an interface to ***ezRESET*** so that the user can have their ID reset.

This cost and timesaving solution prevents installations from having to install a thin-client on each desktop, or using telephony type of interfaces, which can be costly and not always reliable.

# Installing *ezRESET RDI*

## Requirements

Windows NT 4.0 or Windows 2000 PDC, with Domain Administrator Account (User Name and Password).

## Vanguard *ezRESET RDI* Installation Process Checklist

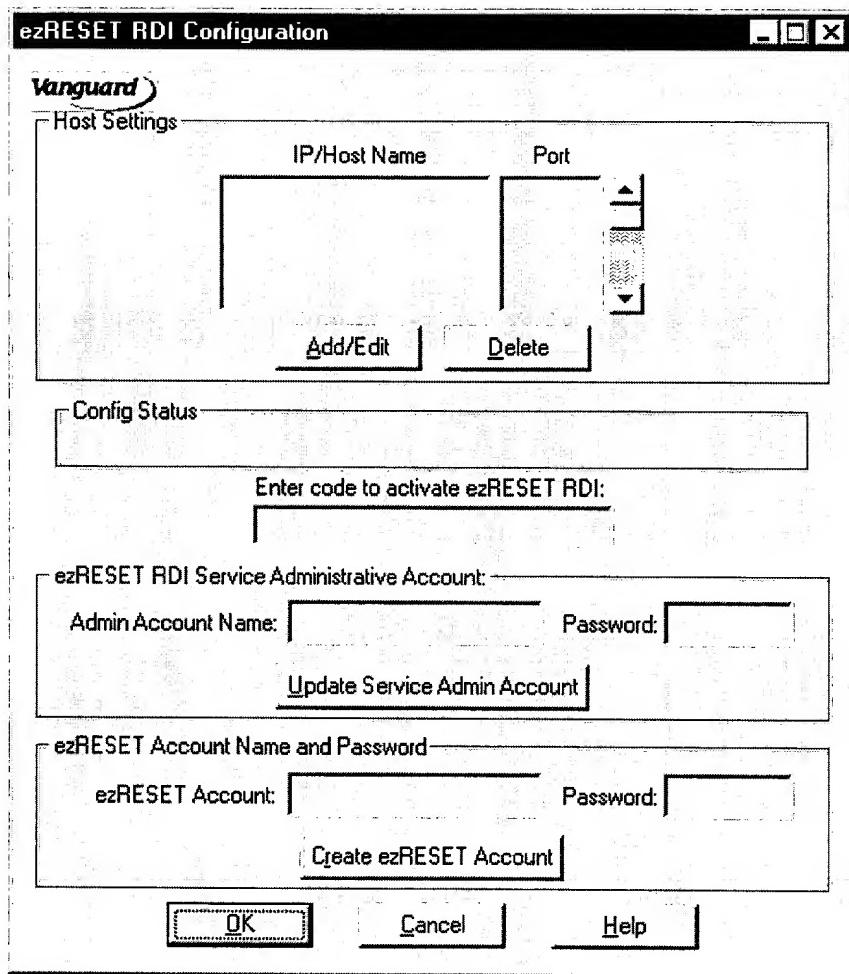
The following checklist is provided to help ensure that all the necessary steps needed to install and use Vanguard *ezRESET RDI* have been accomplished. You should refer to the information below while performing the procedures in this checklist.

- Step 1      Determine that TCP/IP communications between the users desktops and your RDI platform can be established. Use the TCP/IP "PING" command to verify that there is communication.
- Step 2      Review the documentation
- Step 3      Verify that Windows NT 4.0 Server (Service Pack 4 or above) or Windows 2000 is installed.
- Step 4      Determine that your Administrator has access to NT
- Step 5      Copy the RDI files
- Step 6      Install *ezRESET RDI*
- Step 7      Configure the RDI component

## Installation

To install **ezRESET RDI**, perform the following steps:

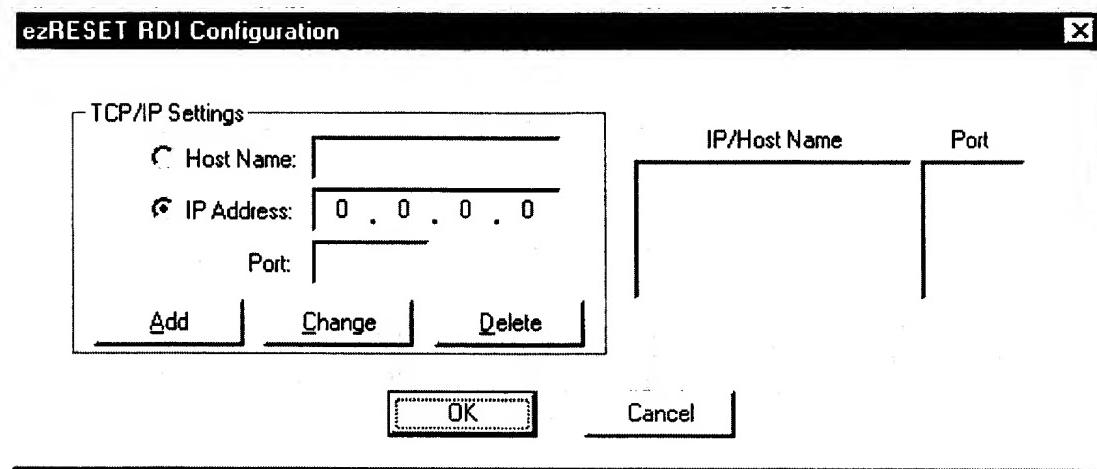
1. Run the supplied ezRESETRDI.exe on the PDC(s) where ezRESET RDI will be installed. This will extract the setup files into a temporary directory.
2. Run the SETUP.EXE from the temporary install directory into the desired directory. The **ezRESET RDI Configuration** dialog box will be displayed.



3. Click **Add/Edit** on the **ezRESET RDI Configuration** panel to establish the **Host Settings** information required to identify the server where users will reset their password. The dialog box shown below will be displayed.

This requires entering the **IP/Host Name** and **Port** for each host (one primary, zero or more backups) where users will reset their password. This information will initially be empty. After this information is established, multiple hosts can be populated in these fields.

## Installation, cont'd



4. Update the **TCP/IP Settings** on this panel as described below:

The information entered will most likely be the same as that defined when configuring the **ezRESET Web Site**.

▼ **TCP/IP Settings**

Enter the TCP/IP information for the specific platform. You may specify a **Host Name** or a specific **IP Address**, and the **Port Number**.

5. Click on **Add** to add an entry to the list.

-or-

Click on **Change** to change an entry in the list while that entry is selected.

-or-

Click on **Delete** to remove an entry from the list.

You may make multiple entries. The first entry in list will be tried first, if that entry is unavailable the next in the list is tried and so on until a host is reached or it is determined that none are available.

6. Enter code to activate **ezRESET RDI**.

This code will be provided by Vanguard Integrity Professionals

## Installation, cont'd

### 7. Enter the **ezRESET RDI Service Account Settings**.

#### ▼ Service Account and Password

Service Account and Password is required for **ezRESET RDI** to get access to workstations in the domain. The information entered, Account Name and Password, is not stored by **ezRESET RDI**.

This must be a Domain Administrator account and requires the "Logon As A Service" right.

Upon running the **ezRESET RDI** configuration utility, if an account name is in the Service Account field, it has been extracted from the Service Control Manager.

Click the **Update Service Admin Account** button to process.

### 8. Enter the **ezRESET Account Settings**

#### ▼ Reset Account and Password

The Username of the account by which a user will logon to trigger a "password reset". Users will not be able to perform a logon with this account, it will be controlled by **ezRESET RDI**.

If you uninstall **ezRESET RDI**, you will be given the option to remove this account so that it cannot be used.

The account can be created (with the Create Reset Account button) or can already exist.

Password is only required for an account that is to be created. If the account already exists you need only enter the Username.

Click the **Create ezRESET Account** button to process.

### 9. Reboot the Machine

You may now reboot the machine and **ezRESET RDI** will be ready for use. You can test that it is working by attempting a logon using the specified Reset Account and Password

## Post Installation Reconfiguration

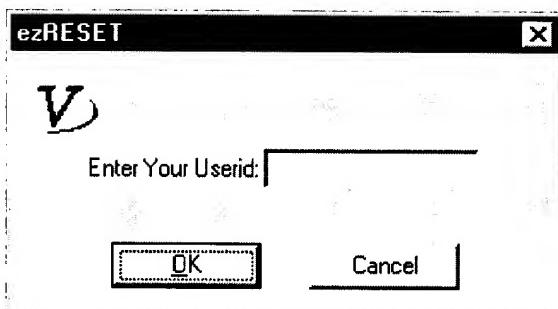
After the product has been installed, you may want to reconfigure the existing setup. To do so, run the supplied ezRESETRDIConfig.exe. The **ezRESET RDI Configuration** dialog box shown on page 4 will be displayed which will allow you to make the appropriate changes.

# Using ezRESET RDI

## Resetting Password

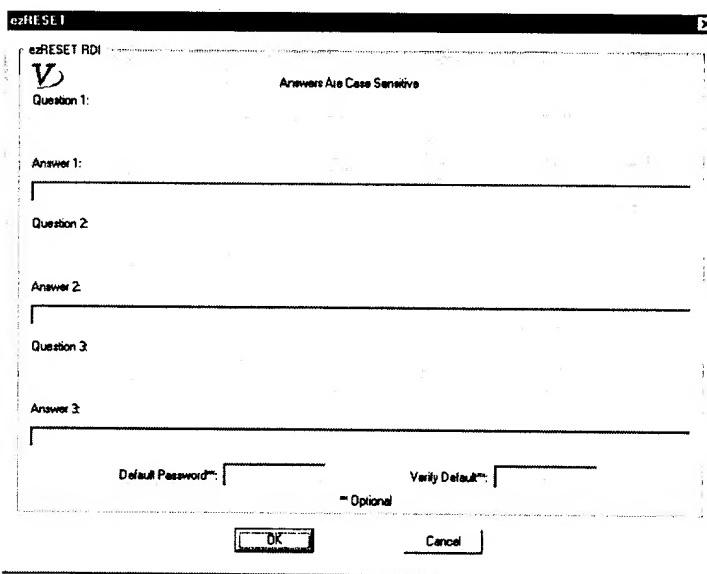
When users have forgotten their password and cannot access their desktop to get to the **ezRESET** web site, it will be necessary for them to use the RDI to reset their password.

This is accomplished by using the **ezRESET** account defined in the **ezRESET RDI** configuration. The user will “log on” using the **ezRESET** account and password (in this case we will presume the account is **RESET**, with a password of **RESET**). The logon will be denied, but this act of logging in using the **RESET** account will trigger the RDI to be run on the user desktop and the following dialog box will be displayed on their machine:



The user will then enter their UserID and (if they have already registered) will then be shown a dialog box with their questions to be answered:

The user then answers their question and optionally enters a Default password, presses OK and (if they answered their questions correctly) their password will be reset to their Default.



## Remote Desktop Interface

**Why a Need:** We had need to run a program on a users desktop (in this particular case, to allow the user to reset their own password) without the user having to log in to their machine. Running a program in the secure desktop (the screen with “Press Ctrl + Alt + Delete to log on”) is fairly simple, but our problem extended a little further. We did not want this program to be stored on the users desktop. Therefore we had need to allow the user to run a program at will that was not stored on their own machines and without requiring them to log on.

The necessity for these requirements are as follows: We have need of allowing a user to run a program at will without logging in – this is necessary as the program in this case allows a user to reset their own password, and the most likely instance of this being used by a user would be when they can not log on to their machines (because of a forgotten password for instance). We do not want to have our software stored on each users desktop as this adds an undesirable amount of potential maintenance plus installation time for organizations with large numbers (thousands) of users.

Therefore we had need to develop a system that, after certain conditions are met installs a program on a remote machine that will remove itself without trace after execution is completed.

**Current State of the Art:** Currently there is no method of running a program on a remote machine if that program does not exist on said machine.

Walkthrough:

- 1) Login attempt is captured by the RDI Subauth.
- 2) We compare the user name of from the login attempt to a stored value known as the "Reset Account Name". If the names match go on to 3b, if not go to 3a.
- 3a) If the names match then we know a Reset is being attempted. First this we want to do is deny the "Reset" account access to the computer.
- 3b) Continue with normal NT login, our program goes back to a wait state to wait for next logon attempt.
- 4) The next this we need to gather info on where this attempt is originating from so get capture the Workstation Name.
- 5) Next we need to communicate with the RDI Server running as a service on the PDC of the Domain of which the Workstation is a member of.
- 6) If communication cannot be established go to 7a, otherwise go to 7b.
- 7a) Communication established so we send the Workstation information to the RDI Server.
- 7b) If we cannot communicate with the RDI server they it may not be installed on that PDC, report an error and quit.
- 8) The RDI Server (running as a service) receives the Workstation information from the RDI Subauth.
- 9) The RDI Server will then create a thread to handle further processing and then wait for further connections.
- 10a) The RDI Server Thread will then attempts to connect to the Workstations Registry and save Configuration information. If this is successful go to step 11a otherwise go to 10b.
- 10b) If the install of configuration does not complete successfully then we remove any data that did get installed on the remote workstation, sever the connection and quit.
- 11a) If configuration information was installed correctly we copy the RDI Program file to the remote machine using a well known administrative share. If this is successful go to 12a, otherwise go to 11b.
- 11b) If the file copy was unsuccessful we remove all Configuration info we have installed on the Workstation and quit.
- 12a) If the file was copied successfully, we access the Workstations Service Control Manager (SCM) and install the RDI Program as a service. Success go to 13a, failure go to 12b.
- 12b) On failure to install as a service, we remove the program file copied previously, and all the configuration information and quit.
- 13a) On success of installing to program as a service we then attempt to start the service (which will start the program). On success go to 14 else go to 13b.
- 13b) On failure of the program to start we remove the program as being a service, remove the program file itself and remove the configuration information then quit.
- 14) The RDI starts successfully, our thread quits.
- 15) Our program executes, pops up an interface to the secure desktop (where you press Ctrl + Alt + Delete).
- 16) The program finishes all tasks, it then removes itself from being a service, removes all configuration information, and finally removes itself, the program file and quits.